

REMARKS

Claims 1-30 are pending in the present application. In the Office Action, the Examiner indicated that claims 9-10 contain allowable subject matter. Claims 9-10 have been rewritten in independent form including all the limitations of the base claim and any intervening claims. Applicants respectfully request that the Examiner's objections to claims 9-10 be withdrawn.

In the Final Office Action, claims 1, 11-13, 16, and 23-25 were rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by Weaver, et al (U.S. Patent No. 4,882,754). Claims 2-5, 3-7, 14-15, 17-22, and 26-30 were rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Weaver. Claim 8 was rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Weaver in view of Mirfakhraei (U.S. Patent No. 6,570,912). The Examiner's rejections are respectfully traversed.

Weaver is directed to a data reduction system for use in audio transmitters and receivers. The system described by Weaver includes a transmitter having a buffer 36 and a receiver having a buffer 50. A buffer fullness detector 44 determines a fullness of the buffer 36 and provides a buffer fullness signal, F, to a logic unit 24, which uses the buffer fullness signal to determine how much truncation, if any, should be employed at a truncation unit 22. See Weaver, col. 6, ll. 11-17 and Figure 1. The truncation unit 22 may set one or more least significant bits of the sample signal stream to zero, or one, under control of the logic unit 24. See Weaver, col. 4, ll. 38-42. The truncated sample signal stream may be provided to the buffer 36 and then transmitted to the receiver using a channel 38. A digital decoder 56 in the receiver decodes the encoded signals, which are supplied to a reconstruction filter 58 and then to a digital-to-analog converter 60 for conversion to analog form. See Weaver, col. 6, ll. 32-44 and Figure 2.

Weaver does not describe or suggest deleting (as set forth in claims 1 and 16) or compressing (as set forth in claims 11 and 23) selected samples of data from the buffer in response to the storage capacity being exceeded. In contrast, Weaver teaches truncating the received signal (*i.e.* the sample signal stream) before it is provided to the buffer. Furthermore, Weaver does not describe or suggest reconstituting the selected samples of data deleted or compressed. However, in the Final Office Action, the Examiner alleges that claims 1, 11, 16, and 23 do not set forth truncating data from the buffer and therefore the Examiner alleges that these claims read on the disclosure of Weaver. Applicants respectfully disagree for at least the following reasons.

With regard to independent claims 1, 11, 16, and 23 Applicants describe and claim methods, and corresponding apparatuses, for determining if samples of data being received will exceed the storage capacity of a buffer. With particular regard to independent claim 1, Applicants also describe and claim deleting selected samples of data from the buffer in response to the storage capacity being exceeded and reconstituting the selected samples of data deleted from the buffer. For example, when a latency problem occurs in a receiver 310, and a sample buffer 505 cannot hold all of the samples, a buffer control 510 will delete some of the samples from the buffer 505. In one embodiment, the buffer control 510 may delete samples in contiguous blocks at the head, end, or middle of the buffered data within the sample buffer 505. The buffer control 510 will store the precise starting and ending location of any deleted samples and transfer this location information to the receive software running on the control unit 315 along with the remaining samples from the sample buffer 505 such that the deleted data may be reconstituted. Alternatively, the buffer control 510 may delete the samples of the sample buffer 505 corresponding to every *n*th sample. The buffer control 510 would also record the exact start,

stop, and step used, and transfer this information to the receive software running on the control unit 315 along with the remaining samples. See Patent Application, pages 15-16 and Figures 3 and 5.

With particular regard to independent claim 11, Applicants also describe and claim compressing the samples of data from the buffer in response to the storage capacity being exceeded and decompressing the samples of data that were compressed. For example, when a latency problem occurs in a receiver 310, and a sample buffer 505 cannot hold all of the samples, the data in the sample buffer 505 may be compressed. The buffer control 510 records the exact location where the compression occurred, and transfers this information to the receiver software so that the compressed samples may be expanded and restored.

Thus, Applicants respectfully submit that claims 1, 11, 16, and 23 set forth deleting (as set forth in claims 1 and 16) or compressing (as set forth in claims 11 and 23) selected samples of data from the buffer. Thus, for at least the aforementioned reasons, Applicants respectfully submit that 1, 11-13, 16, and 23-25 are not anticipated by Weaver and request that the Examiner's rejections of these claims be withdrawn.

Moreover, it is respectfully submitted that the pending claims are not obvious in view of Weaver. To establish a *prima facie* case of obviousness, the prior art reference (or references when combined) must teach or suggest all the claim limitations. *In re Royka*, 490 F.2d 981, 180 U.S.P.Q. 580 (CCPA 1974). As discussed above, Applicants respectfully submit that Weaver does not teach or suggest all the limitations of the present invention. In particular, Weaver does not teach or suggest deleting (as set forth in claims 1 and 16) or compressing (as set forth in claims 11 and 23) selected samples of data from the buffer in response to the storage capacity being exceeded, or reconstituting the selected samples of data deleted or compressed. In fact,

Weaver is completely silent with regard to reconstituting the selected samples of data deleted or compressed.


For at least the aforementioned reasons, Applicants respectfully submit that the present invention is not obvious over Weaver and request that the Examiner's rejections of claims 2-5, 3-7, 14-15, 17-22, and 26-30 be withdrawn.

With regard to dependent claim 8, the Examiner relies on Mirfakharaei to teach a transmission system for transmitting voice and data comprising a symbol alignment and time equalizer circuit. However, Mirfakharaei does not remedy the aforementioned deficiencies of the primary reference. Thus, for at least the aforementioned reasons, Applicants respectfully submit that dependent claim 8 is not obvious over Weaver in view of Mirfakhraei and request that the Examiner's rejection be withdrawn.

For the aforementioned reasons, it is respectfully submitted that all claims pending in the present application are in condition for allowance. The Examiner is invited to contact the undersigned at (713) 934-4052 with any questions, comments or suggestions relating to the referenced patent application.

Respectfully submitted,

Date: 3/22/04


Mark W. Sincell, Ph.D.
Reg. No. 52,226
Williams Morgan & Amerson, P.C.
10333 Richmond Avenue, Suite 1100
Houston, TX 77042
(713) 934-7000
(713) 934-7011 (Fax)

AGENT FOR APPLICANTS